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FROM: Winston Hsu, PATENT AGENT, REG. NO. : 41,526

SERIAL NO.: 09/683,099

ATTORNEY DOCKET NO.: YMBP0001USA

SUBJECT: PRELIMINARY AMENDMENT

TOTAL PAGES: 9 PAGES (INCLUDING COVER PAGE)

Winston Hsu 2004/07/01

YMBP0001USA0_A3_1

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PTO/SB/87 (08-00)

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APPLICATION NUMBER: 09/683,099

PAPERS INCLUDED:

(1) Transmittal Form	1 PAGE
(2) Fee Transmittal	1 PAGE
(3) Response to the Non-Compliant Amendment	5 PAGES

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TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>		Application Number	09/683,099
		Filing Date	11/16/2001
		First Named Inventor	Shih-Hsang Shen
		Art Unit	2643
		Examiner Name	NI, SUHAN
Total Number of Pages in This Submission	7	Attorney Docket Number	YMBP0001USA

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Remarks	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Winston Hsu, Reg. No.: 41,526
Signature	<i>Winston Hsu</i>
Date	7/1/2004

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

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FEE TRANSMITTAL

for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 0.00)

Complete if Known

Application Number	09/683,099
Filing Date	11/16/2001
First Named Inventor	Shih-Hsoring Shen
Examiner Name	NI, SUHAN
Art Unit	2643
Attorney Docket No.	YMBP0001USA

METHOD OF PAYMENT (check all that apply)

 Check Credit card Money Order Other None
 Deposit Account:

Deposit Account Number 50-3105
 Deposit Account Name North America Intellectual Property Corp.

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee(s) or any underpayment of fee(s)
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FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1) (\$ 0.00)			

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Independent Claims	Multiple Dependent	Extra Claims below	Fee Paid
			-20 ^{**} =	X =
			-3 ^{***} =	X =

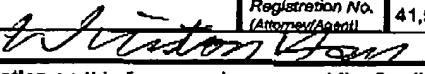
Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1202 18	2202 9	Claims in excess of 20	
1201 86	2201 43	Independent claims in excess of 3	
1203 290	2203 145	Multiple dependent claim, if not paid	
1204 86	2204 43	** Reissue independent claims over original patent	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2) (\$ 0.00)			

*or number previously paid, if greater. For Reissues, see above

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to Institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1808 180	1808 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination or of a design application	
Other fee (specify) _____			
*Reduced by Basic Filing Fee Paid		SUBTOTAL (3) (\$ 0.00)	

(Complete if applicable)

Name (Print/Type)	Winston Hsu	Registration No. (Attorney/Agent)	41,526	Telephone	886289237350
Signature					
Date	2/1/2004				

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PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Shih-Hsorng Shen, Examiner: Ni, Suhan

5 Shuenn-Tsong Young,
Weileun Fang

Filing Date: 11/16/2001 Art Unit: 2643

App. No.: 09/683,099 Docket No.: YM-BP0001USA

10 Title: HEARING AID DEVICE WITH FREQUENCY-SPECIFIC
AMPLIFIER SETTINGS

To: Commissioner for Patents

P.O. BOX 1450

15 Alexandria, VA 22313-1450

Subject: Response to the Notice of Non-Compliant Amendment dated
06/04/2004

20 Dear Sir or Madame:

In response to the Notice of Non-Compliant Amendment identified above, the
AMENDMENTS TO THE CLAIMS section is submitted below. All claims are
identified with proper status identifiers. Consideration of all amendments is politely
25 requested.

AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): An acoustic signal input device comprising:
an input for inputting acoustic signals;
5 a plurality of bandpass-filtering units each for passing acoustic signals with frequencies within a predetermined frequency range, and transforming the acoustic signals into electrical signals and amplifying the electrical signals; and
a plurality of switches each connected to a corresponding bandpass-filter
10 filtering units for controlling on and off of the bandpass-filter filtering units;
wherein the switches are capable of being selectively turned on so as to such that the bandpass filtering units amplify transformed electrical signals within different frequency ranges at different amplifications.
15

Claim 2 (currently amended): The acoustic signal input device of claim 1 wherein each of the bandpass-filter filtering units comprises:
two signal transformation units for transforming acoustic signals into electrical signals, the signal transformation units having different resonant
20 frequencies for filtering the electrical signals; and
a differential amplifier electrically connected to the signal transformation units for amplifying a difference between the electrical signals transmitted from the signal transformation units.

25 Claim 3 (currently amended): The acoustic signal input device of claim 1 wherein each of the bandpass-filter filtering units is an amplitude-tunable filter capable of changing amplification of electrical signals.

Claim 4 (original): The acoustic signal input device of claim 1 being connected to an
30 amplifier for further amplifying the electrical signals transmitted from the acoustic signal input device.

Claim 5 (currently amended): The acoustic signal input device of claim 1 wherein the plurality of bandpass filter filtering units are formed by performing a micromachining fabrication process.

5 Claim 6 (currently amended): The acoustic signal input device of claim 1 ~~being a microphone 2 wherein the signal transformation units are microphones.~~

Claim 7 (currently amended): An acoustic signal input device comprising:
an input for inputting acoustic signals;
10 a plurality of bandpass filters each for passing acoustic signals with frequencies within a predetermined frequency range and transforming the acoustic signals into electrical signals;
a plurality of amplification circuits connected to the bandpass filters for amplifying electrical signals transmitted from the
15 bandpass filters; and
a plurality of switches each connected to a corresponding amplification circuit for controlling on and off of the amplification circuit;
wherein the switches are capable of being controlled to selectively turn on the amplification circuits so as to amplify electrical signals transmitted from the
20 bandpass filters within different frequency ranges at different amplifications.

Claim 8 (original): The acoustic signal input device of claim 7 wherein each of the bandpass filters comprises:
two signal transformation units for transforming acoustic signals into electrical
25 signals, the signal transformation units having different resonant frequencies for filtering the electrical signals; and
a differential amplifier electrically connected to the signal transformation units for amplifying a difference between the electrical signals transmitted from the signal transformation units.
30

Claim 9 (original): The acoustic signal input device of claim 7 being connected to an amplifier for further amplifying the electrical signals transmitted from the

acoustic signal input device.

5 Claim 10 (original): The acoustic signal input device of claim 9 wherein the amplifier is connected to an acoustic signal output device for transforming the electrical signals transmitted from the amplifier into acoustic signals and outputting the acoustic signals.

10 Claim 11 (original): The acoustic signal input device of claim 7 wherein the plurality of bandpass filters are formed by performing a micromachining fabrication process.

Claim 12 (currently amended): The acoustic signal input device of claim 7 being a microphone 8 wherein the signal transformation units are microphones.

15 Claim 13 (original): An acoustic signal output device electrically connected to a signal source, the signal source comprising a plurality of channels for transmitting electrical signals within different frequency ranges, the acoustic signal output device comprising:
20 a plurality of amplifying elements connected to different channels of the signal source for amplifying electrical signals at different amplifications and transforming amplified electrical signals into acoustic signals.

25 Claim 14 (currently amended): The acoustic signal output device of claim 13 wherein each of the amplifying elements has a greatest specific amplification for electrical signals within a frequency range corresponding to a frequency range of a channel that is connected to the amplifying element.

30 Claim 15 (original): The acoustic signal output device of claim 13 further comprising:
a plurality of switches each connected to a corresponding amplifying element for controlling on and off of the amplifying element;
wherein the switches are capable of being controlled to selectively turn on amplifying elements so as to amplify electrical signals within different

frequency ranges at different amplifications.

Claim 16 (original): The acoustic signal output device of claim 13
wherein the signal source is an amplifier, the amplifier amplifying
5 the electrical signals before the electrical signals are transmitted to
the acoustic signal output device.

Claim 17 (original): The acoustic signal output device of claim 13
wherein the signal source is connected to an acoustic signal input
10 device for receiving electrical signals from the acoustic signal input
device.

Claim 18 (original): The acoustic signal output device of claim 13 being a speaker.

15 Claim 19 (original): The acoustic signal output device of claim 13 wherein each of the
amplifying elements comprises a signal transformation unit for transforming
amplified electrical signals into acoustic signals.

20 Claim 20 (original): The acoustic signal output device of claim 13 being formed by
performing a micromachining fabrication process.

Sincerely yours,

25 *Winston Hsu*
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30 e-mail: winstonhsu@naipo.com.tw
(Please contact me by e-mail if you need a telephone
communication and I will return your call promptly.)

Date: 7/11/2004